

June 20, 2017

Via Electronic Comment Filing System

Marlene H. Dortch  
Office of the Secretary  
Federal Communications Commission  
445 12th Street SW, Room TW-A325  
Washington, DC 20554

Re: Sirius XM Radio Inc. request for limited waiver of EAS Part 11 rules (PS Docket No. 15-94).

Dear Marlene H. Dortch:

I would like to comment on Sirius XM Radio Inc.'s June 5, 2017, motion for reconsideration and request for limited waiver of Emergency Alert System, Part 11 rules as part of PS Docket No. 15-94.

I generally support Sirius XM's limited waiver request, with some minor clarifications. Sirius XM is correct that EAS rules are inconsistent for different types of EAS participants. As each new type of EAS participant was added over the years, different exceptions were created. However, the issues identified by Sirius XM are not unique. A limited waiver of parts of EAS rules, which would not exempt an EAS participant from meeting the overall goals of the EAS, is appropriate.

Many types of EAS participants multiplex programming channels using greater levels of compression for secondary and niche channels. Even traditional terrestrial radio and TV broadcasters using HD Radio and HDTV may transmit multiple channels allocating less bandwidth to secondary channels. The primary channels use high bandwidth, high quality video and audio codecs capable of transmitting the AFSK modem tones used in EAS headers. But for business and technical reasons, providers often use lower bandwidth, highly compressed codes for secondary or niche channels with smaller audiences.

Because virtual channels in a digital multichannel system use the same transmission facility, normally any compatible virtual channel for EAS daisy-chain monitoring purposes is just as good as any other virtual channel in the same digital multiplex. Downstream EAS participants do not monitor all channels in a digital multiplex. Instead they monitor a specific audio channel. As long the downstream EAS monitor station knows which specific virtual channel supporting AFSK EAS data bursts will be used as the EAS daisy-chain message source, other virtual channels using AFSK incompatible audio codecs won't impact the EAS daisy-chain. To minimize manual upstream/downstream coordination, digital multichannel systems carrying EAS daisy-chain messages on only a subset of virtual channels, should designated the primary channel or a widely accessible channel such as the barker channel on each satellite to serve as a EAS daisy-chain source channel. As long as the channel is well-known and accessible, the specific channel designation doesn't matter. Like any other programming channel, the EAS daisy-chain source channel can be used for other purposes day-to-day.

## **Clarifications and Suggestions**

These suggestions are applicable to any digital multichannel participant. But for the purposes of this limited waiver, Sirius XM specific examples are used.

1. The Commission should not grant EAS participants full exemptions from EAS monthly or weekly testing. Even if no other EAS participant normally relies on a particular EAS source for normal EAS operations; on the hypothetical “very bad day,” any working facility may be needed to reconstitute the national “daisy-chain.” Regular testing ensures all physical facilities, including Sirius XM, are operational and ready in the unlikely event they are needed to reconstitute part of the EAS daisy-chain. No one can predict ahead of time, which facilities will still be operational on the “very bad day.”
2. Weekly tests of the EAS header and EOM are primarily for equipment testing and daisy-chain link confirmation. Weekly tests are usually transmitted on all channels, but in digital multichannel systems, only necessary on the virtual channels designated for the EAS daisy-chain source. The weekly tests are essentially audio noise on other channels. Granting a limited waiver for AFSK incompatible audio codecs on secondary and niche channels on the same digital system source would not prevent EAS tests and activations the primary channel using an AFSK compatible codec.
3. Monthly and national audio tests of the EAS header, Attention signal, audio message and EOM verify equipment readiness, EAS daisy-chain operation and provide public education. Tests must be transmitted on the designated EAS daisy-chain channel for the first two purposes. But the monthly and national audio tests are also for public familiarity and education. Monthly and national tests should be transmitted on other programming channels, including channels using AFSK incompatible audio codecs. Again, granting a limited waiver for AFSK incompatible codecs on secondary or niche channels may not activate EAS equipment, but the public will still hear the AFSK EAS tones, Attention signal and audio message for education and familiarity purposes.
4. Sirius XM’s petition confirms listeners will continue to receive information about national EAS activations on all programming channels, including channels with AFSK incompatible audio codecs. Sirius XM’s petition is vague what the information will sound like on channels with AFSK incompatible codecs. My assumption is EAS activations would still sound like an EAS alert to a human with an EAS Header, Attention Signal, audio message and EOM. Only EAS decoder equipment would be sensitive to the audio codec incompatibility. Sirius XM did not request a waiver for actual EAS activations.

## **Additional Digital Multichannel Testing Issues**

Sirius XM Radio Inc. no longer includes revising EAS testing rules as part of its motion for reconsideration of a limited waiver. Nevertheless, I also support the request the Commission revise its EAS testing rules for digital multichannel EAS participants.

- Require digital multichannel systems transmit weekly tests on a designated EAS daisy-chain virtual channel, e.g., a primary channel or most widely accessible channel for each system. A participant may still transmit weekly tests on other programming channels.
- Require digital multichannel systems transmit monthly tests on a designated EAS daisy-chain virtual channel, e.g., a primary channel or widely accessible channel for each

system, as well as a subset of programming channels rotating through all programming channels throughout the year. A participant may still transmit monthly tests on all programming channels. National tests must still be transmitted on all programming channels, consistent with national EAS activations.

## **Conclusions**

In conclusion, I support Sirius XM Radio's petition for a limit waiver permitting use of AFSK incompatible audio codecs on secondary and niche channels, as long as

- Sirius XM transmits all required weekly, monthly and national tests and actual EAS activations on at least one predictable, widely accessible channel using an audio codec compatible with AFSK EAS data bursts suitable for activating EAS decoders.
- Sirius XM transmits required monthly and national tests, and actual EAS activations on all programming channels with the EAS Header, Attention Signal, audio message and EOM; including those channels with AFSK incompatible audio codecs. On channels with AFSK incompatible audio codecs, the AFSK data bursts should sound like EAS messages to a human, but do not need to activate EAS decoders.

In a future rulemaking, the Commission should also revise its EAS testing rules to restore consistency between multichannel participants, including DBS, SDARS, analog and digital cable systems, IPTV systems, digital radio and HDTV broadcasters. A next-generation EAS could use digital control signals instead of audio AFSK, avoiding these problems on digital systems.

If you have any questions concerning these comments, please do not hesitate to call (703-892-1810) or email ([sean@donelan.com](mailto:sean@donelan.com)) me.

Respectfully submitted,

Sean Donelan